



8C-CHE-932-01

CD STEREO RADIO CASSETTE RECORDER

CSD-FD88

CSD-FD99

OPERATING INSTRUCTIONS

En (English)

INSTRUCCIONES DE MANEJO

E (Español)

MODE D'EMPLOI

F (Français)

COMPACT
disc
DIGITAL AUDIO

For assistance and information

visit us on the internet at

www.us.aiwa.com

call toll free 1-800-BUY-AIWA
(United States only)

Owner's Record

The model number is located at the bottom and the serial number is located on the rear.

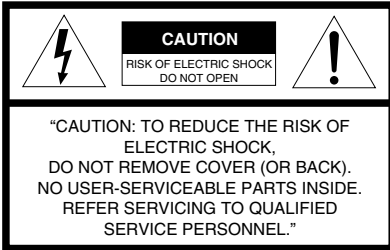
Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Aiwa dealer regarding this product.

Model No. _____

Serial No. _____

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



Explanation of Graphical Symbols:



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION

The use of optical instruments with this product will increase eye hazard.

IMPORTANT SAFETY

Read the Operating Instructions carefully and completely before operating the unit. Be sure to keep the Operating Instructions for future reference. All warnings and cautions in the Operating Instructions and on the unit should be strictly followed, as well as the safety suggestions below.

Warning

To prevent electric shock or injury, these safety instructions should be followed in the installation, use and servicing the unit.

Installation

Attachments – Do not use attachments not recommended by the unit manufacturer as they may result in the risk of fire, electric shock or injury to persons.

Water and Moisture – Do not use this unit near water - for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.

Heat – Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).

Mounting surface – Place the unit on a flat, even surface.

Accessories – Do not place this unit on an unstable cart, stand, tripod, bracket, or table. The unit may fall, causing serious injury to a child or an adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the unit. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

Portable cart – An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



Ventilation – The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm clearance from the rear and the top of the unit, and 5 cm from the each side.

Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to ensure reliable operation of the unit and to protect it from overheating, these openings must not be blocked or covered. The openings should never be blocked by placing the unit on a bed, sofa, rug or other similar surface. This unit should not be placed in a built-in installation such as a bookcase unless proper ventilation is provided.

INSTRUCTIONS

Object and Liquid Entry – Never push objects of any kind into this unit through the cabinet slots as they may touch dangerous voltage points or short-circuit parts that could result in a fire or electric shock. Never spill liquid of any kind on the unit.

Electric Power

Power Sources – This unit should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. To operate unit on battery power, or other sources, refer to the operating instructions.

Grounding or Polarization – This unit is provided with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

Power-Cord Protection – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

Overloading – Do not overload wall outlets, extension cords, integral convenience receptacles as this can result in a risk of fire or electric shock.

Lightning

For added protection for this unit receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the unit due to lightning and powerline surges.

Maintenance

Cleaning – Unplug this unit from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

Damage Requiring Service

Unplug this unit from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- 1) When the power cord or plug is damaged.
- 2) If liquid has been spilled, or objects have fallen into the unit.
- 3) If the unit has been exposed to rain or water.
- 4) If the unit does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to normal operation.
- 5) If the unit has been dropped or the cabinet has been damaged.
- 6) When the unit exhibits a distinct change in performance - this indicates a need for service.

Do not attempt to service this unit yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Replacement Parts – When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or having the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

Safety Check – Upon the completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.

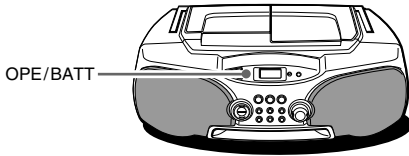
En

Condensation – Moisture may form on the CD pickup lens when:

- The unit is moved from a cold spot to a warm spot
- The heating system has just been turned on
- The unit is used in a very humid room
- The unit is cooled by an air conditioner

When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.

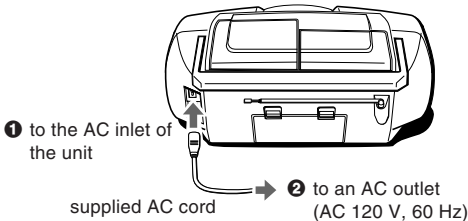
Power supply



The OPE/BATT indicator lights up while the power is on.

Using on AC house current

Connect the AC cord as illustrated below.



- The rated voltage of the unit is 120 V AC.
- If abnormal high voltage is supplied, "Hi" flashes in the display and the unit does not accept any operation. Disconnect the AC cord.

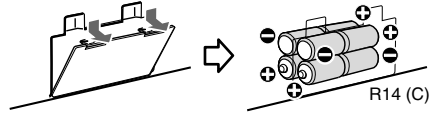
CAUTION

Use only the supplied AC cord. Use with other cords may result in the risk of fire.

Using on batteries

Open the lid of the battery compartment on the rear and insert eight R14 (size C) batteries, not supplied, as illustrated below. Then close the lid.

To switch from AC power supply to battery supply, disconnect the AC cord from the AC inlet.



- When using the unit on the batteries, the display light is out.

When the OPE/BATT indicator becomes dim, volume decreases, or sound is distorted during operation, replace the batteries.

When the batteries become weak during tape operation, "Lo" flashes in the display. In stop mode, the unit will not accept ● REC, ►|| PLAY/PAUSE, ◀◀ and ▶▶. In playback or recording mode, the unit will be stopped and turned off. Replace the batteries.

Notes on batteries

To avoid damage from leakage or explosion, observe the following:

- Insert the batteries with the ⊕ and ⊖ marks correctly aligned.
- Do not mix different types of batteries or old batteries with new ones.
- When the unit is not to be used for a long period, remove the batteries.
- Never recharge the batteries, apply heat to them or take them apart.
- Remove dead batteries.

If liquid leaks from the batteries, wipe thoroughly to remove.

Maintenance

To clean the cabinet

Use a soft cloth lightly moistened with mild detergent solution. Do not use strong solvents such as alcohol, benzene or thinner.

To clean the heads

- When the tape heads are dirty;
- high frequency sound is not emitted
 - the sound is not adequately high
 - the sound is off-balance
 - the tape cannot be erased
 - the tape cannot be recorded on

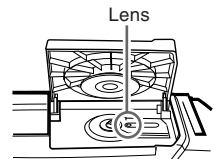
After every 10 hours of use, clean the tape heads with a head cleaning cassette.

Use separately sold dry-type or wet-type cleaning cassette.

Refer to the instructions of the cleaning cassette for details.

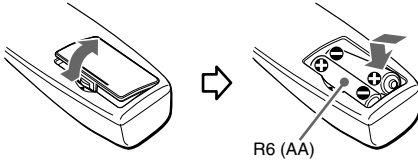
To clean the lens

Use a cotton swab slightly moistened with cleaning fluid. Wipe gently from the center to the edge.



Remote control

Insert two R6 (size AA) batteries.



When the reach of the remote control signal is less than 5 meters (16 feet), replace the batteries.

The remote control may not operate correctly when:

- The unit is exposed to intense light, such as direct sunlight
- Objects block the remote control signal to the unit

To use the buttons on the remote control

Buttons on the remote control and the main unit with identical indications have the same functions.

To turn the power on

Press POWER to turn on the display.

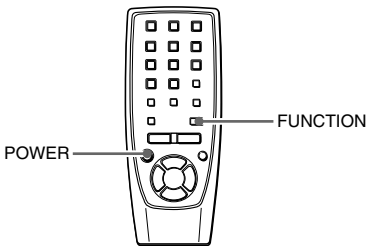
When using the unit on the batteries, this button will not turn the power on.

To turn the power off

Press POWER to turn off the display.

To use the FUNCTION button

Each time FUNCTION is pressed while the power is on, the function is selected cyclically.



Specifications

Radio section

Frequency range, antenna – FM: 87.5 - 108.0 MHz
Rod antenna, AM: 530/531 - 1,710/1,602 kHz (10/9 kHz step) Ferrite bar antenna

Deck section

Track format – 4 tracks, 2 channels / Frequency range – Normal tape: 50 - 12,500 Hz (JEITA) / Recording system – AC bias / Erasing system – AC erase / Heads – Recording/playback head (1), Erasure head (1)

CD player section

Disc – Compact disc / Scanning method – Non-contact optical scanner (semiconductor laser) /

Laser diode properties –

Material: GaAlAs

Wavelength: $\lambda = 780 \text{ nm}$

Emission duration: Continuous

Laser output: Less than 44.6 μW (This output is the value measured at a distance of 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture.)

General

Speaker – 100 mm cone type (2), 36 mm cone type (2)

/ Output – Headphones jack (stereo mini-jack) / Power

output – CSD-FD99: 4.5 W + 4.5 W (JEITA, 3.2 ohms,

THD 10% DC). CSD-FD88: 2.5 W + 2.5 W (JEITA, 7

ohms, THD 10% DC). / Power requirements – DC 12 V

using eight size C (R14) batteries, AC 120 V, 60 Hz /

Power consumption – CSD-FD99: 21 W. CSD-FD88:

16 W. / Dimensions (W \times H \times D) – 464.7 \times 186 \times 314.3

mm (18³/₈ \times 7³/₈ \times 12³/₈ in.) / Weight (excluding

batteries) – CSD-FD99: 4.1 kg (9 lbs. 1 oz.). CSD-

FD88: 3.9 kg (8 lbs. 10 oz.). / Accessories – Remote

control (1), AC cord (1)

Specifications and external appearance are subject to change without notice.

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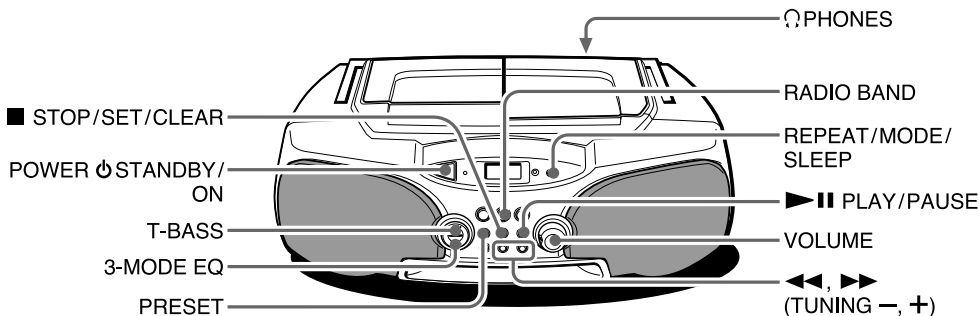
Please check the copyright laws relating to recordings from disc, radio or external tape for the country in which the machine is being used.

If an erroneous display or malfunction occurs

Turn off the unit and press POWER \odot STANDBY/ON while pressing \blacksquare .

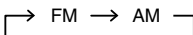
If the unit cannot be reset in the way above, disconnect the AC cord and remove all the batteries to turn off the display.

Leave the unit for a while and turn the power back on.



A RADIO OPERATION

- 1 Press RADIO BAND* repeatedly to select the desired band.**



The power is turned on and the previously tuned station is received.

* or BAND on the remote control (applicable when the AC cord is connected)

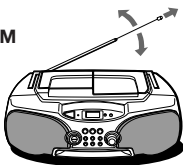
- 2 Press ◀▶, ▶▶ (TUNING -, +) to select a station.**

During FM stereo reception, ((Ⓜ)) is displayed.

After listening, press POWER ⏻ STANDBY/ON to turn the power off.

For better reception

FM



Extend the rod antenna and orient it for the best reception.

AM



The antenna is inside the unit. Position the unit for the best reception.

For quick tuning (Auto Search)

Keep ◀▶, ▶▶ pressed until the tuner starts searching for a station. When a station is tuned to, the search stops.

If the broadcast signal is weak, it does not stop. To stop the search manually, press ◀▶ or ▶▶.

REPEAT/MODE/SLEEP*

- If an FM stereo broadcast contains noise, press the button so that **MONO** is displayed. Noise is reduced, although reception is monaural. To restore stereo reception, press the button again.
 - If a high-pitched sound is heard during AM recording, press the button repeatedly to display "b1" or "b2", so as to eliminate the noise.
- * or MODE on the remote control

To change the AM tuning interval

The default setting of the AM tuning interval is 10 kHz/step. If you use the unit in an area where the frequency allocation system is 9 kHz/step, change the interval as follows.

- 1 Press RADIO BAND.
- 2 Press POWER ⏻ STANDBY/ON while pressing RADIO BAND.

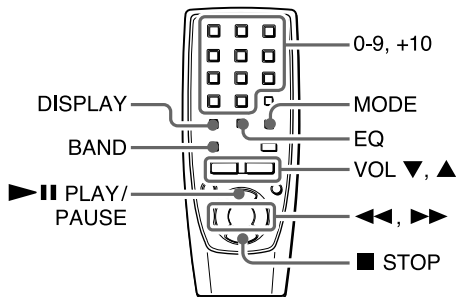
When the AM tuning interval is changed, the preset stations are cleared.

NOTE

If the unit picks up noise from other electrical appliances nearby, like a TV or fluorescent lights, move the unit.

To listen with the headphones

Connect headphones with a stereo mini plug to the PHONES jack on the rear of the unit.



SOUND ADJUSTMENT

Volume or tone adjustment does not affect recording.

VOLUME (VOL)

Turn VOLUME on the unit or press VOL ▲ or ▼ on the remote control. The volume level is displayed as a number from 0 to 25.

- The volume level is automatically set to 14 if the power is turned off when the volume level is set to 15 or more.
- Pressing DISPLAY on the remote control displays the adjusted volume level.

3-MODE EQ* (equalizer)

Press 3-MODE EQ repeatedly until the desired mode is displayed.

The equalizer mode changes to R (Rock), P (Pop), J (Jazz) or no equalization, cyclically.

Rock - Emphasizes the high and low range of music.

Pop - Emphasizes voice and midrange of music.

Jazz - Emphasizes the low range of music.

* or EQ on the remote control

T-BASS system

The T-BASS system enhances the realism of low-frequency sound.

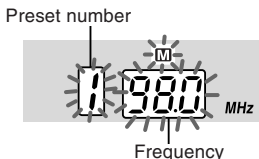
Press T-BASS to turn it on or off.

PRESETTING STATIONS

You can preset up to 15 stations in each band.

- 1 Select a station.**
- 2 Press ■ STOP/SET/CLEAR* once so that "M" is displayed to store the station.**

A station is assigned a preset number, beginning from 1 in consecutive order for each band.



* or ■ STOP on the remote control

- 3 Repeat steps 1 and 2.**

The next station will not be stored if a total of 15 preset stations have already been stored for a band.

To listen to preset stations

Select a band then press PRESET or ►|| PLAY/PAUSE repeatedly.

To select a preset number directly with the remote control

Press the numbered buttons 0-9 and +10.

Example:

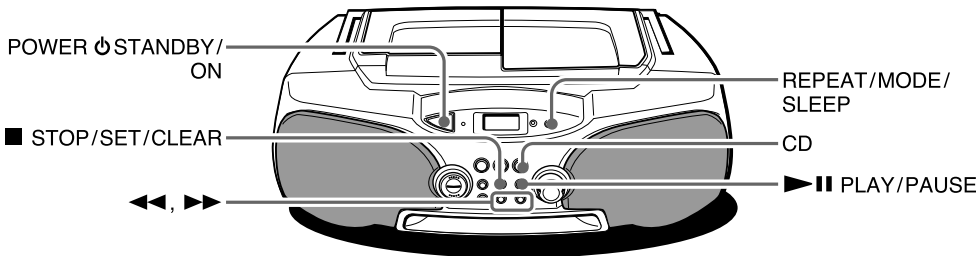
To select number 15, press +10 and 5.

To select number 10, press +10 and 0.

To clear a preset station

Select the preset number first. Within 4 seconds, hold down ■ until "M" and the preset number disappear.

The higher numbers in the band are decreased by one.

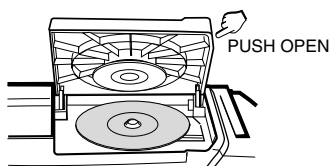


B CD OPERATION

1 Press CD.

The power is turned on.

2 Press PUSH OPEN to open the disc compartment. Place a disc with the printed side up and close the disc compartment.



Total number of tracks and total playing time are displayed. It will take about 15 seconds when loading a CD-RW disc.

3 Press ►► PLAY/PAUSE to start play.

The number of the track being played and elapsed playing time are displayed.

■ **STOP/SET/CLEAR*** – Stops play.

* or ■ **STOP** on the remote control

►► **PLAY/PAUSE** – Pauses play. To resume play, press again.

◀◀, ▶▶ – Searches for a particular point during playback. Hold down ◀◀ or ▶▶ and then release it.

– Skips to the beginning of a track. Press ◀◀ or ▶▶ repeatedly.

To select a track directly with the remote control, press the numbered buttons 0-9 and +10. CD play starts from the selected track and continues to the last track.

Example:

To select number 25, press +10, +10 and 5.

To select number 10, press +10 and 0.

After listening, press **POWER ⏻ STANDBY/ON** to turn the power off.

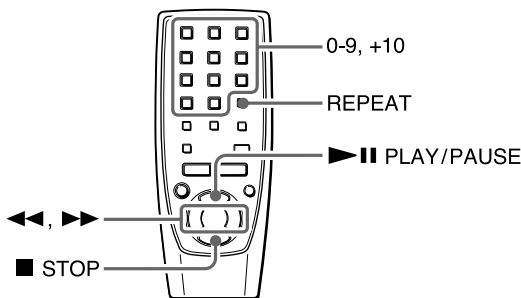
NOTE

- Do not use irregular shape CDs (example: heart-shaped, octagonal ones). It may result in malfunctions.
- Do not place more than one disc in the disc compartment.
- Do not try to open the disc compartment during play.
- Do not touch the lens. Doing so may cause malfunctions.
- The unit may not play a CD-R/RW disc that is recorded on personal computers or some kinds of CD-R/RW recorders because of differences in recording platforms.
- Do not attach any seal or label to either side (the recordable side or the labeled side) of a CD-R/RW disc. It may cause malfunction.
- Do not load an unrecorded CD-R/RW disc. It will take over 30 seconds to read the disc. The disc may be damaged if you try to open the disc compartment while reading the disc.

Music discs encoded with copyright protection technologies

This product is designed to playback discs that conform to the Compact Disc (CD) standard.

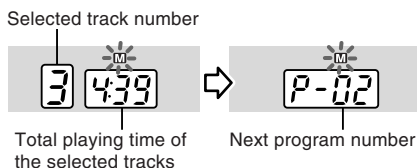
Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.



PROGRAMMED PLAY

Up to 30 tracks can be programmed from the disc.

- 1 In stop mode, hold down ■ STOP/SET/CLEAR* until "M" flashes in the display.**
The program number, "P-01" is also displayed.
* or ■ STOP on the remote control
- 2 Press ◀◀ or ▶▶ to select a track, then press ■ to store it.**



Pressing the numbered buttons 0-9 and +10 on the remote control selects and stores the track at the same time.

- 3 Repeat step 2 to program other tracks.**
- 4 Hold down ■ to finish the program.**
Total number and total playing time of the selected tracks are displayed.



Pressing ▶|| finishes the program and starts programmed play.

To check the program, press ◀◀ or ▶▶.

To clear the program, press ■ once in stop mode so that "M" disappears in the display.

To change the programmed tracks, clear the program and repeat all the steps again.

NOTE

The total playing time of the selected tracks will be displayed as " - -: - ":

- When it exceeds "99:59".
- When a track number 31 or higher is selected.

REPEAT, RANDOM PLAY

A single track or all tracks can be played repeatedly, and all the tracks randomly. Random play can be repeated as well.

Press REPEAT/MODE/SLEEP* repeatedly.

The mode changes as follows:

☑1: Repeats a single track. Select a track with ◀◀ or ▶▶.

☑: Repeats all the tracks.

RANDOM: Plays all the tracks randomly.

RANDOM and ☑: Plays all the tracks repeatedly in random order.

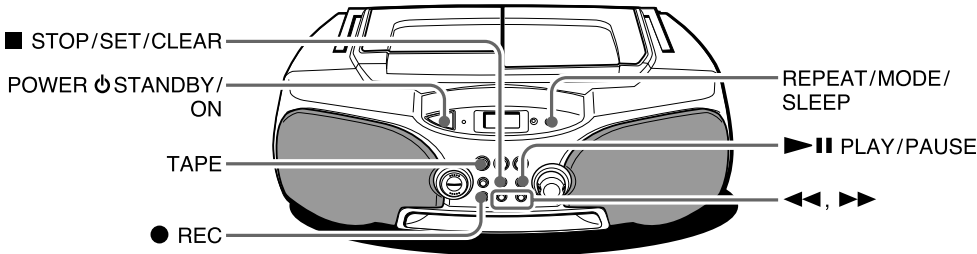
To cancel, press the button repeatedly so that ☑ and/or RANDOM disappears.

* or REPEAT on the remote control

NOTE

- During random play, you cannot skip back to the previous track with ◀◀.
- When selecting a track with the numbered buttons, random play is canceled.
- During programmed play, you cannot select RANDOM and ☑1.

En

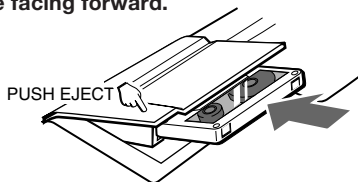


C TAPE OPERATION

- Use Type I (normal) tapes only.
- The unit plays (records on) the side facing up.

PLAYBACK

- 1 Press **TAPE**.
The power is turned on.
- 2 Press **PUSH EJECT** to open the cassette holder and insert a tape with the side to be played facing up and the exposed side facing forward.



Press PUSH EJECT to close.

- 3 Press **►|| PLAY/PAUSE** to start playback.



To set the tape counter to "0000"

Press **■** in stop mode. The counter is also set to "0000" when opening the cassette holder.

- **STOP/SET/CLEAR*** – Stops play.
* or ■ STOP on the remote control
- || **PLAY/PAUSE** – Pauses play. During pause mode, the tape counter flashes. To resume play, press again.
- ◀◀/▶▶ – Rewinds/ fast forwards. To stop the winding, press **■**.

After listening, press **POWER ⏻ STANDBY/ON** to turn the power off.

RECORDING

- 1 Insert a tape with the side to be recorded on facing up and the exposed side facing forward.
- 2 Get ready to record from the source.
To record from a CD, press CD and load the disc.
To record from a radio broadcast, press RADIO BAND and tune to a station.
- 3 Press **● REC**.
The unit enters recording pause mode and "REC" flashes slowly in the display.
- 4 Press **►||** to start recording.
"REC" lights up in the display.
When the selected function is CD, CD play and recording starts simultaneously.

To record only the selected tracks of a CD

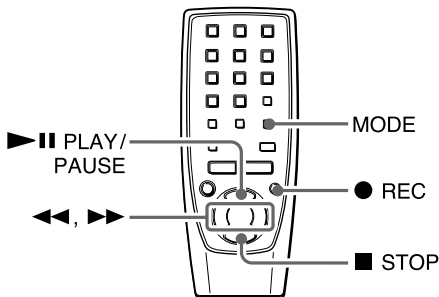
- 1 Follow steps 1 to 4 of PROGRAMMED PLAY on page 9 to program tracks.
- 2 Press **●**.
- 3 Press **►||**.

To stop recording, press **■**.

To pause recording (only when the source is RADIO), press **►||**. During recording pause mode, "REC" flashes slowly. To resume, press it again.

To erase recording, press **TAPE** and start recording (press **●** then **►||**).

After recording, press **POWER ⏻ STANDBY/ON** to turn the power off.

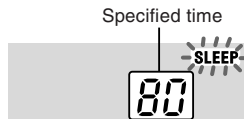


SETTING THE SLEEP TIMER

The unit can be turned off automatically at a specified time.

- 1** Hold down **REPEAT/MODE/SLEEP*** until **"SLEEP"** flashes in the display.
* or MODE on the remote control
- 2** Within 4 seconds, press **◀◀** or **▶▶** to specify the time until the power is turned off.

Each time it is pressed, the time changes between 10 and 180 minutes in 10-minute steps.



While the sleep timer works, "SLEEP" is displayed.

To check the time remaining until the power is turned off

Repeat step 1 shown above. The remaining time is displayed for 4 seconds.

To cancel the sleep timer

Repeat step 1 to display the remaining time and hold down REPEAT/MODE/SLEEP again until "OFF" is displayed.

Simple sleep timer setting

Press REPEAT/MODE/SLEEP while the power is off. The unit is turned on with the last function, and the sleep timer is automatically turned on with the 30-minute setting. Select the function, if you need, and start playback.

To prevent accidental erasure

Break off the plastic tabs on the cassette tape with a screwdriver or other pointed tool after recording.

To record on the tape again

Cover the tab openings with adhesive tape, etc.



NOTE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- ... Reorient or relocate the receiving antenna.
- ... Increase the separation between the equipment and receiver.
- ... Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ... Consult the dealer or an experienced radio/TV technician for help.

CAUTION

Modifications or adjustments to this product, which are not expressly approved by the manufacturer, may void the user's right or authority to operate this product.

CAUTION

TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

This Class B digital apparatus complies with Canadian ICES-003.

(CSD-FD99 only)

REMARQUE

Cet appareil a été testé et jugé conforme aux limites des appareils numériques de Classe B, conformément à la Partie 15 des Règles FCC. Ces limites sont conçues pour fournir une protection raisonnable contre les interférences néfastes dans une installation résidentielle.

Cet appareil produit, utilise et peut rayonner une énergie de fréquence radio et, s'il n'est pas installé et utilisé conformément aux instructions, peut provoquer des interférences gênantes pour les communications radio. Mais rien ne garantit qu'une telle interférence ne se produira pas dans une installation particulière. Si cet appareil produit des interférences gênantes pour la réception radio ou de télévision, ce qui peut se déterminer en allumant et éteignant l'appareil, il est recommandé à l'utilisateur d'essayer de corriger cette interférence en appliquant une ou plusieurs des méthodes ci-dessous.

- ... Réorientation ou déplacement de l'antenne réceptrice.
- ... Eloignement de l'appareil du récepteur.
- ... Raccordement de l'appareil à une prise d'un circuit différent de celui du récepteur.
- ... Consultez le revendeur ou un technicien radio/télévision expérimenté.

PRÉCAUTION

Les modifications ou ajustements de ce produit, non expressément approuvés par le fabricant, peuvent invalider le droit ou l'autorité de l'utilisateur à utiliser ce produit.

ATTENTION

POUR PREVENIR LES CHOCS ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

(Modèle CSD-FD99 seulement)